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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,066	07/10/2001	Joseph Weinberger	118-004F	1252
26633	7590	12/23/2004	EXAMINER	
HELLER EHRMAN WHITE & MCAULIFFE LLP 1666 K STREET,NW SUITE 300 WASHINGTON, DC 20006			POON, KING Y	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/902,066	Applicant(s) WEINBERGER ET AL.	
	Examiner King Y. Poon	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/28/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "wherein the control computer and the chip are separate chips"; "wherein the chip has first circuitry for converting serial data transmitted from the personal computer into parallel data and converting parallel data transmitted from the copier into serial data, and second circuitry for driving a pair of signal lines according to the converted serial data, the first and second circuitry being incorporated in the chip"; "wherein the network comprises a plurality of lines, each of the plurality of lines having at least a pair of signal lines transmitting asynchronous serial data"; " wherein a condition of the copier and setup parameters, a copy count and error codes of the copier are displayed on a display screen of the personal computer"; "wherein the chip comprises a RAM"; "wherein the chip comprises a microprocessor" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 17-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 17: The limitation of "wherein the chip has first circuitry for converting serial data transmitted from the personal computer into parallel data and converting parallel data transmitted from the copier into serial data, and second circuitry for driving a pair of signal lines according to the converted serial data, the first and second circuitry being incorporated in the chip" is subject matter which was not

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described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 18: The limitation of "wherein the network comprises a plurality of lines, each of the plurality of lines having at least a pair of signal lines transmitting asynchronous serial data"

Regarding claim 23: The limitation of "wherein the control computer and the chip are separate chips" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 24: The limitation of "wherein the chip comprises a RAM" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 25: The limitation of "wherein the chip comprises a microprocessor" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 26: The limitation of "wherein the microprocessor comprises an address decoder" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

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inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 27: The limitations of " wherein a condition of the copier and setup parameters, a copy count and error codes of the copier are displayed on a display screen of the personal computer" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 19-22, 28-31: Claims 19-22, 28-31 are rejected under 35 U.S.C. 112, first paragraph because they depend on rejected claim 18.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 32: Claim 32 recites the limitations of "image forming device." It is unclear the image forming device is referring to the copier system or an image forming device of the copier system.

Regarding claim 33-35: Claims 33-35 are rejected under 35 U.S.C. 112, second paragraph because it depends on rejected claim 32.

Note: Claims 32-35 cannot be rejected, using prior art, because the relationship of "image forming device" and the copier system is unclear. Therefore, claims 32-33 cannot be properly interpreted by the examiner. Claims 32-33 might also contain 112 first paragraph issue depends on what the "image forming device" is.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kravette (US 5,077,582) in view of McCracken (RE. 31222), Hepworth et al (US 3,975,712) and Stephens et al (US 4,644,478).

Regarding claim 16: Kravette teaches a copier system (e.g., fig. 2, fig. 3, column 16, lines 24-38) comprising: a copier (copier, fig. 2) capable of being monitored by a computer (computer, column 9, lines 14-40) from a remote location, the copier comprising a control computer (16, fig. 1, column 5, lines 4-7) controlling the performance of the copier (diagnostic data, column 9, column 8, lines 42-65), and a control panel (34, fig. 1, column 9, lines 40-68) that configured to receive data from the control computer; a circuit (12, fig. 1) corresponding to the copier, the chip providing an interface (20, fig. 1) for connecting the copier with a bi-directional (inherent properties of an local area network, column 8, lines 25-26) network, said bi-directional network being

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capable of connecting the computer to a plurality of devices (fig. 2, column 16, lines 30-38), and a memory device corresponding to the copier, the memory device (RAM 102, column 11, lines 53-60) storing data comprising a special information to identify the copier in the network, wherein the special information when transmitted to the personal computer identifies the copier remotely in the network and enables recognition of the copier by a database manager of the computer (the program of the computer that controls the computer such that from the signal received, the computer is able to identify the copier, column 13, lines 45-51).

Kravette does not teach the computer is a personal computer.

Stephen, in the same area of computer, teaches the type of computer comprises personal computer which function can be programmed for specific application such as monitoring. (column 3, lines 20-35)

Since Kravette teaches to use a computer for the monitoring the copier and it is well known in the art that all computers can be programmed to perform a specific function, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kravette to include: using a person computer as the monitoring computer, as taught by Stephen, because a personal computer is cheaper, lighter, more variety and can be purchase from every computer stores.

Kravette does not teach the interface circuit is a chip/integrated circuit.

Hepworth, in the same area of interface circuit, teaches interface circuit can be putted in a chip (abstract, column1, lines 55-69, column 2, lines 5-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kravette to include: putting the communication interface circuit onto a chip.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kravette by the teaching of Hepworth because of the following reasons (a) a chip is small and light; and (b) a chip is cheap, Hepworth, column 2, lines 5-10.

Kravette also does not teach the memory device capable of retaining data if power is removed.

McCracken, in the same area of memory, teaches using memory device capable of retaining data if power is removed (column 3, lines 35-40).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kravette to include: using memory device capable of retaining data if power is removed, as taught by McCracken because it would have prevented the unique identification stored in the memory from being lost which would cause system malfunctioning.

Regarding claim 17: Hepworth teaches that it is well known in the art that an interface chip has first circuitry for converting serial data transmitted from the personal computer into parallel data and converting parallel data transmitted from the copier into serial data, and second circuitry for driving a pair of signal lines according to the converted serial data, the first and second circuitry being incorporated in the chip (column 1, lines 55-69).

8. Claims 18-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kravette (US 5,077,582) in view of McCracken (RE. 31222), Hepworth et al (US 3,975,712) and Stephens et al (US 4,644,478) as applied to claim 16 above, and further in view of Biffle et al (US 4,625,077).

Regarding claim 18: Kravette teaches the system comprises a telephone network (fig. 2).

Inherently a telephone network comprises a plurality of lines/phone numbers, Biffle teaches each of the plurality of phone lines having at least a pair (column 6, lines 35-40) of signal lines transmitting asynchronous serial data (column 9, lines 9-15, Kravette, column 2, lines 19-25, Hepworth).

Regarding claim 19: Kravette teaches wherein the plurality of lines comprises four signal lines (a phone network has at least four signal lines/four pair of twist pair) comprising the pair of signal lines.

Regarding claim 20: Kravette teaches wherein the pair of signal comprise a hard wiring (twisted pair are hard wiring).

Regarding claim 21: Biffe teaches wherein the pair of signal lines has high immunity from external noise sources (inherent properties of phone lines, column 2, lines 10-18).

Regarding claim 22: Kravette does not teaches the computer is mounted on a computer board.

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However, it is well known in the art, (official notice) that a computer is mounted on a computer board.

It would have been obvious to a person with ordinary skill in the art to mount the computer onto a computer board to stabilize the computer.

Regarding claim 23: Kravette does not teach wherein the control computer and the chip are separate chips.

However, it is well known in the art (official notice) that a computer/processor is implemented in a chip by itself.

It would have been obvious to a person with ordinary skill in the art to implement the computer into a separate chip such that the computer can be mass produce to reduce the price of the computer.

Regarding claim 24: Kravette teaches wherein the chip comprises a random access memory (28, fig. 1)

Regarding claim 25: Kravette teaches wherein the chip comprises a microprocessor (24, fig. 1).

Regarding claim 26: Kravette teaches wherein the microprocessor comprises an address decoder (inherent properties of storing and retrieving data from a memory, also see fig. 1).

Regarding claim 27: Kravette teaches wherein a condition of the copier and setup parameters (column 11, lines 53-60), a copy count (column 6, lines 45-50), and error code (column 13, lines 55-60, column 14, lines 60-65) are displayed on a display screen (column 7, lines 39-52) of the personal computer.

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Regarding claim 28: Kravette wherein the control panel comprises a light emitting diode (column 4, lines 38-42).

Regarding claim 29: Kravette wherein the control panel comprises a liquid crystal display (column 4, lines 38-42).

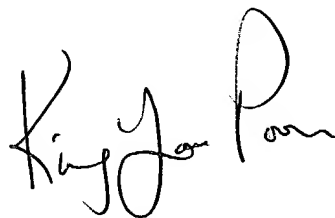
Regarding claim 30: Kravette teaches wherein the control panel comprises a plurality of keys (column 9, lines 40-45)

Regarding claim 31: Kravette teaches wherein an error status signal is sent from the control computer to the control panel (column 9, lines 40-55).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

December 16, 2004

A handwritten signature in black ink that reads "King Y. Poon". The signature is written in a cursive, flowing style.

**KING Y. POON
PRIMARY EXAMINER**